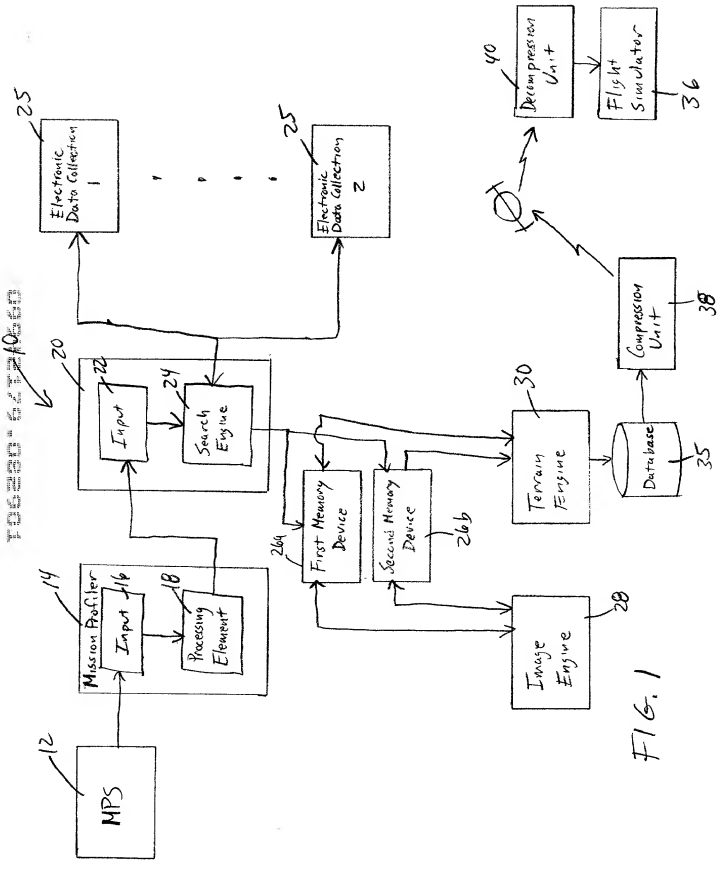
MPS
12
Mission Profiler
14
Input 16
Processing Element
18
10
20
Input
22
Search Engine
24
Electronic Data Collection 1
25
Electronic Data Collection 2
25
First Memory Device
26a
Second Memory Device
26b
Image Engine
28
Terrain Engine
30
Database
35
Compression Unit
38
Decompression Unit
40
Flight Simulator
36

FIG. 1

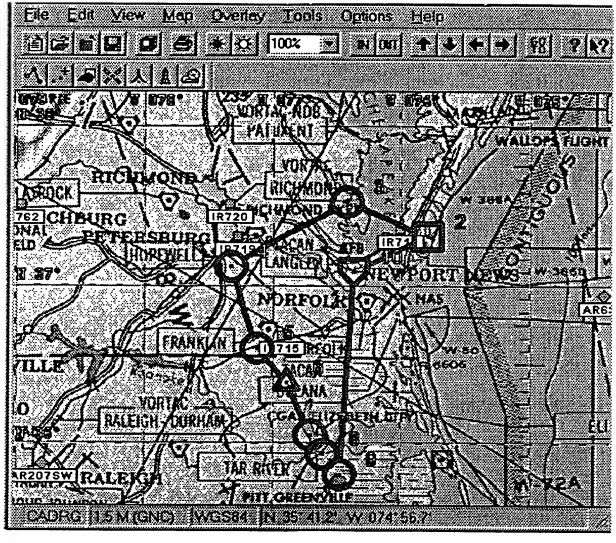
File Edit View Map Overlay Tools Options Help
100%
RICHMOND
PETERSBURG
NORFOLK
NEWPORT
FRANKLIN
RALEIGH-DURHAM
RALEIGH
TAR RIVER
IR720
IR718
IR715
CADRG | 1.5 M (GNC) | WGS84 | N 35° 41.2' W 074° 56.7'

FIG. 2

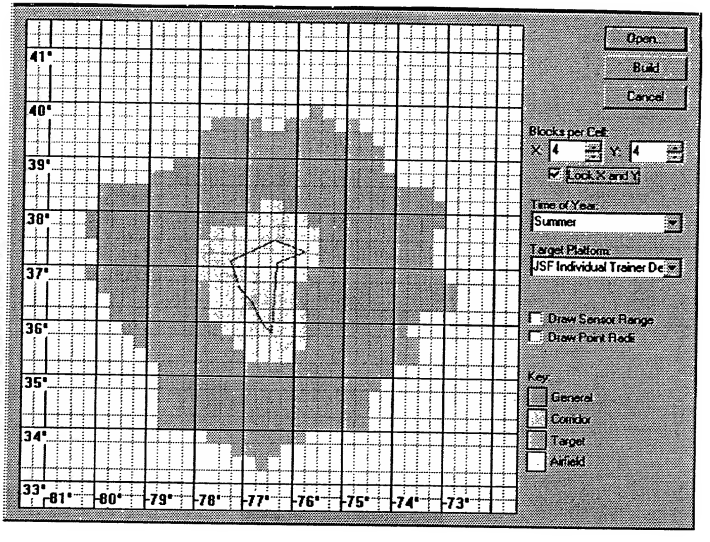
Open...
Build
Cancel
Blocks per Cell:
X: 4
Y: 4
Lock X and Y
Time of Year:
Summer
Target Platform:
JSF Individual Trainer Dc
Draw Sensor Range
Draw Point Reds
Key
General
Corridor
Target
Airfield
41°
40°
39°
38°
37°
36°
35°
34°
33°
-81°
-80°
-79°
-78°
-77°
-76°
-75°
-74°
-73°

FIG. 3

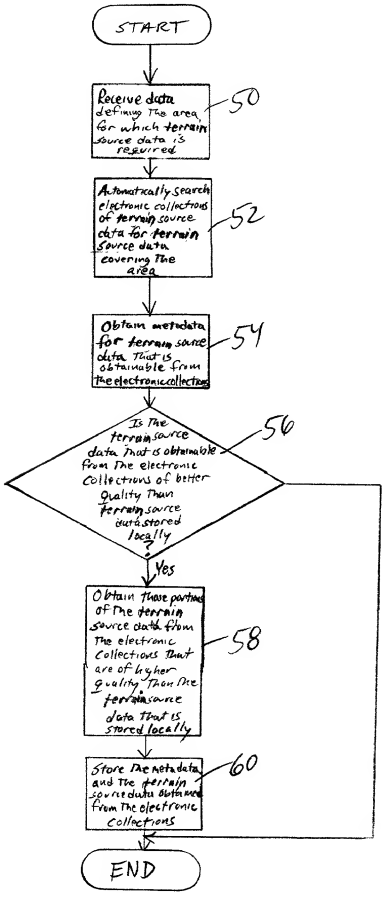
START
Receive data defining the area for which terrain source data is required
50
Automatically search electronic collections of terrain source data for terrain source data covering the area
52
Obtain metadata for terrain source data that is obtainable from the electronic collections
54
Is the terrain source data that is obtainable from the electronic collections of better quality than terrain source data stored locally?
56
Yes
Obtain those portions of the terrain source data from the electronic collections that are of higher quality than the terrain source data that is stored locally
58
Store the metadata and the terrain source data obtained from the electronic collections
60
END

FIG. 4

Imagery Source Data
Image Environment
70
Image Registration
72
Low Resolution Elevation Model
Elevation Extraction
74
Image Rectification
76
Low Resolution Imagery
Image Resolution Merge
77
Image Mosaic
78
Material Set
80
Elevation Correction
86
Corrected Elevation Model
Image Tonal Balance
79
Imagery Data
Material Classification
82
Material Map
2D Feature Extraction
84
Low Resolution Feature Data
Vector Data
3D Feature Extrusion
88
Feature Models

FIG. 5

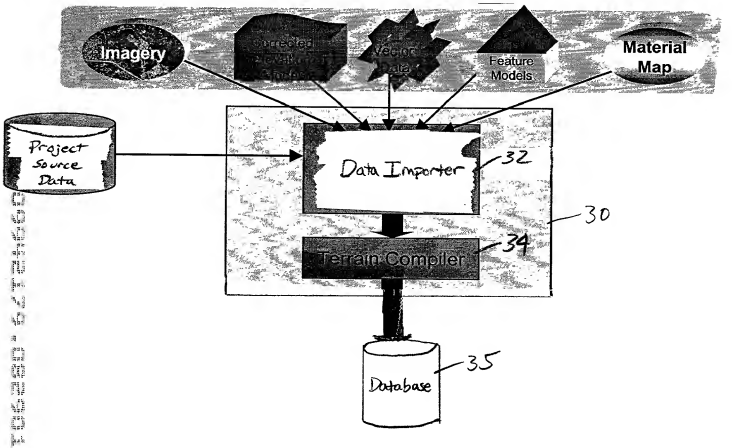
Imagery
Vector Data
Feature Models
Material Map
Project Source Data
Data Importer
32
30
Terrain Compiler
34
Database
35

FIG. 6

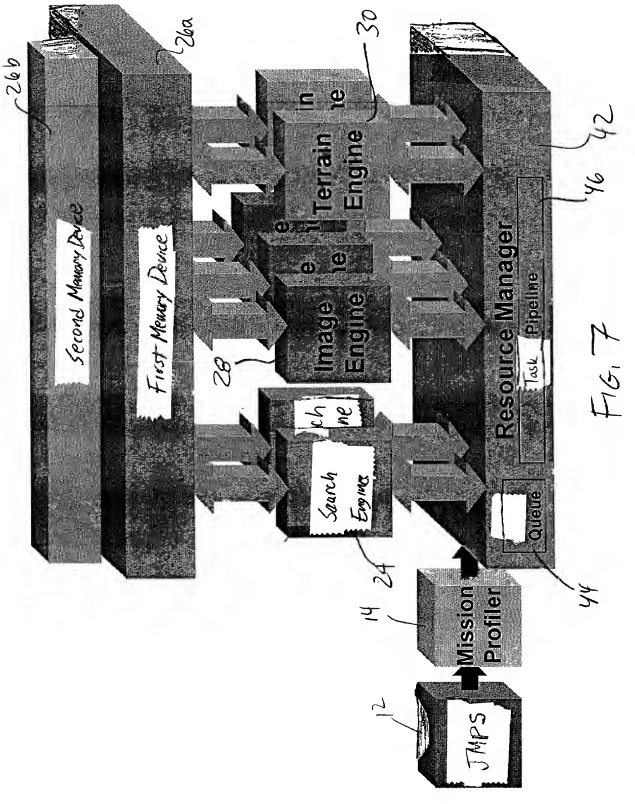
26b
Second Memory Device
26a
First Memory Device
28
Image Engine
Terrain Engine
30
Search Engine
24
Resource Manager
Task
Pipeline
Queue
44
46
42
14
Mission Profiler
12
JMPS

FIG. 7